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BEFORE THE  
Federal Communications Commission  
WASHINGTON, D.C.

JAN 29 2001

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

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Revision of the Commission's Rules  
To Ensure Compatibility with  
Enhanced 911 Emergency Calling Systems

CC Docket No. 94-102 /

**PETITION FOR RECONSIDERATION OF THE  
CELLULAR TELECOMMUNICATIONS & INTERNET ASSOCIATION**

The Cellular Telecommunications & Internet Association ("CTIA")<sup>1</sup> hereby submits this Petition for Reconsideration of the Fourth Report and Order released in the above-captioned proceeding on December 14, 2000.<sup>2</sup> As discussed below, CTIA respectfully requests that the Commission reconsider the *Fourth R&O* to clarify the scope of its directive concerning digital wireless networks having the capability of supporting proprietary enhanced TTY protocols in emergency communications. While this issue was only recently brought to the Commission's and the industry's attention, it appears that the Commission has once again placed the obligation solely on the wireless industry, albeit through the TTY Forum, "to investigate these issues and to work towards necessary solutions." While the Commission has acknowledged that such effort depends upon the cooperation of TTY manufacturers, the Fourth R&O does not demonstrate that

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<sup>1</sup> CTIA is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the association covers all Commercial Mobile Radio Service ("CMRS") providers and manufacturers, including cellular, broadband PCS, ESMR, as well as providers and manufacturers of wireless data services and products.

<sup>2</sup> *In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems*, CC Docket No. 94-102, Fourth Report and Order, FCC 00-436 (rel. December 14, 2000) ("*Fourth R&O*").

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TTY manufacturers have any obligation to participate in this effort. Moreover, there is significant concern that the Commission's directive may contravene existing government policy that encourages Federal agencies to use voluntary consensus standards in regulatory activities rather than proprietary protocols. Similarly, it appears that the directive is inconsistent with the Commission's Section 255 rules, which also encourages voluntary consensus standards with respect to compatibility. Accordingly, CTIA respectfully request that the Commission reconsider its decision and impose a similar obligation upon TTY manufacturers whereby TTY devices must be harmonized and compatible with advanced telecommunications technology. Until TTY protocol standards are developed, the wireless industry should not be required to address proprietary enhanced TTY protocols.

**I. The TTY Forum Clearly Demonstrates the Need for TTY Protocol Standardization.**

Initially, the TTY Forum agreed that it would focus its efforts on solving for 45.45 Baudot. The Forum reached this decision based on extensive discussion concerning the embedded base and prevalence of TTY devices with 45.45 Baudot protocol. Moreover, TTY manufacturers, at that time, were strongly opposed to sharing technical data concerning their proprietary TTY protocols, particularly in an open technical forum such as the TTY Forum. Although they were disinclined to share such information, TTY manufacturers assured the Forum that TTY devices with proprietary enhanced protocols were capable of defaulting to 45.45 Baudot. Hence, the wireless industry moved forward to develop a standardized solution to address 45.45 Baudot and expedited the standards process accordingly.<sup>3</sup>

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<sup>3</sup> As the Commission acknowledges, requiring TTY devices to revert to Baudot provides a solution for transmitting emergency calls. *Fourth R&O* at ¶22.

At the November 9, 2000 TTY Forum Meeting, the Forum learned from TTY manufacturers and Gallaudet University that TTY devices with such enhanced protocols may fail or garble messages transmitted over digital wireless networks. Rather than standardized enhanced TTY protocols, TTY manufacturers recommend that the digital wireless solutions supports proprietary enhanced TTY protocols such as TurboCode and High Speed. The wireless industry members of the Forum strongly opposed this recommendation for several reasons. First, the Forum has worked for the past two years to develop a standardized solution which did not include enhanced TTY protocols. Enhanced TTY protocols were specifically excluded, because TTY manufacturers opposed sharing information on their proprietary protocols and assured the Forum that TTY devices with such enhanced protocols could default to 45.45 Baudot. The wireless industry developed the standardized solution in reliance of this information.

Second, introducing enhanced TTY protocols to the standard at this late date is a major modification and requires the industry to reopen the standards process. Consequently, implementation of the digital wireless solutions for 45.45 Baudot will be delayed further. Such delay is unacceptable to the industry members of the Forum, particularly when TTY manufacturers have failed or refused to standardize TTY protocols. Third, such efforts redirect personnel and resources from implementation of the digital wireless solutions. One industry member succinctly stated the recurring dilemma when standards group are required to support proprietary protocols. “ If the industry deals with TurboCode (a proprietary enhanced TTY protocol) and another proprietary code is introduced, the original [wireless digital TTY solution]

may not work with the new code, creating a need for another fix.”<sup>4</sup> Such an approach is inefficient, costly and does not encourage TTY harmonization and compatibility on a broader basis. Moreover, proprietary communications protocols cannot be used for emergency calls, absent support by the approximately 6,500 PSAPs in the United States. Accordingly, TTY Forum industry members determined that it is not within their scope and purview to address or support proprietary enhanced protocols such as TurboCode and High Speed.

## **II. Federal Policy Supports Voluntary Consensus Standards In Agency’s Regulatory Activities in Lieu of Proprietary Protocols**

The Commission’s directive may contravene Office of Management and Budget (“OMB”) Circular A-119 and the National Technology Transfer and Advancement Act of 1995 (“NTTA Act”),<sup>5</sup> which establish policies of Federal use and development of voluntary consensus standards. Under these guidelines issued by the OMB, a federal agency *must* use voluntary consensus standards, “technical standards that are developed or adopted by voluntary consensus standard bodies,” “unless use of such standards would be inconsistent with applicable law or otherwise impractical.”<sup>6</sup> As explained above, the wireless industry has agreed that 45.4 Baudot is the most practical solution for establishing a unifying default protocol. Furthermore, 45.4 Baudot does not in any way conflict with applicable law. Thus, under federal policy there is a presumption that 45.45 Baudot protocol should be deployed.

Additionally, the Commission’s directive defeats the underlying purposes of the federal policy on voluntary consensus standards. First, the federal policy is designed to “encourage

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<sup>4</sup> TTY Forum 16 Report, CC Docket 94-102 (filed Nov. 28, 2000), p. 10.

<sup>5</sup> Pub. L. 104-113.

<sup>6</sup> *Memorandum for Heads of Executive Departments and Agencies*, Circular No. A-119 (rel. Feb 10, 1998). <http://www.whitehouse.gov/OMB/circulars/a119>

long-term growth for U.S. enterprise and promote efficiency and economic competition through harmonization of standards.”<sup>7</sup> Adopting proprietary protocols such as TurboCode and High Speed will destroy long-term harmonization by subjecting the wireless industry to an endless stream of new protocol developments in the future. In fact, additional TTY proprietary protocols, beyond the proposed TurboCode and High Speed, are already under development. By subjecting the industry to repeated and unnecessary changes to the standard, the Commission will also conflict with one of the key principles behind the consensus standard: to “decrease ... the burden of complying with agency regulation.”<sup>8</sup> On a similar note, manufacturers cannot be required to develop a proprietary standard since federal policy for voluntary consensus standards also applies to the government’s procurement activities.<sup>9</sup>

### **III. The Commission’s Section 255 rules encourage non-proprietary consensus standards.**

The definition of accessibility found in the Communications Act expressly states that manufacturers do not have to address compatibility issues with proprietary protocols. The Communication’s Act provides in pertinent part: “[t]elecommunications equipment and customer premises equipment *shall* pass through cross-manufacturer, *non-proprietary*, industry-standard codes, translation protocols, formats or other information necessary to provide telecommunications in an accessible format, if readily available.”<sup>10</sup>

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<sup>7</sup> *Id.* at §2.

<sup>8</sup> *Id.*

<sup>9</sup> The majority of PSAPs are quasi-governmental and the federal policy requires the government to maintain open standards.

<sup>10</sup> 47 C.F.R. §6.9 (1999).

Furthermore, in its Section 255 Order the Commission reiterated its strong commitment to ensuring that equipment is both “accessible to” and “usable by” individuals with disabilities by retaining the pass-through of information provision in its definition of accessibility. The Section 255 Order underscores that the pass through of “cross-manufacturer, non-proprietary, industry-standard codes. . . or other information necessary to provide telecommunications in an accessible format” must “ensure, among other things, that signal compression of technologies do not remove information needed for access, or restore it upon decompression.”<sup>11</sup> CTIA fears that the Commission’s directive may jeopardize accessibility, recognized by the Commission to be both the “incorporation of specific features in products” and the “ability of persons with disabilities to actually *use* the equipment or service by virtue of its inherent capabilities and functions.”<sup>12</sup>

#### **IV. Conclusion**

For the reasons explained, CTIA respectfully requests the Commission to reconsider its directive concerning digital wireless networks having the capability of supporting proprietary enhanced TTY protocols in emergency communications.

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<sup>11</sup> *In re Implementation of Section 255 and 251(a)(2) of the Communications Act of 1934, as Enhanced by the Telecommunications Act of 1996*, Report and Order and Further Notice of Inquiry, WT Docket No. 96-198 (rel. Dec. 14, 1999) at ¶22.

<sup>12</sup> *Id.* at ¶23.

Respectfully submitted,

**CELLULAR TELECOMMUNICATIONS  
& INTERNET ASSOCIATION**

A handwritten signature in black ink, appearing to read "Michael F. Altschul", written in a cursive style.

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